

WHAT IS CLAIMED IS:

1. A method of modulating movement of a cell within or to the skin of a mammal, said method comprising administering to said mammal an
5 effective amount of:
- a) an antagonist of CTACK;
 - b) an agonist of CTACK;
 - c) an antagonist of Vic; or
 - d) an agonist of Vic.
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2. The method of Claim 1, wherein said modulating is blocking and said administering is an antagonist of CTACK or Vic.
3. The method of Claim 2, wherein:
- 15 a) said movement is:
- i) within said skin;
 - ii) chemotactic; or
 - iii) chemokinetic;
- b) said administering is local, systemic, topical, subcutaneous,
20 intradermal, or transdermal;
- c) said administering is an antagonist of CTACK or Vic;
- d) said cell is:
- i) a CLA+ cell;
 - ii) a T cell;
 - 25 iii) a dendritic cell; or
 - iv) a dendritic cell precursor;
 - v) a dermal fibroblast cell;
 - vi) a dermal endothelial cell; or
 - vii) a melanocyte; or
- 30 e) said cell moves into the dermis and/or epidermis layers of said skin.

4. The method of Claim 2, wherein:
- a) said antagonist is selected from:
 - i) a mutein of natural CTACK or Vic;
 - ii) an antibody which neutralizes CTACK or Vic; or
 - iii) an antibody which blocks GPR2 ligand binding;
 - b) said mammal is subject to a transplant or skin graft;
 - c) said antagonist is administered in combination with an antibiotic, analgesic, immune suppressive therapeutic, anti-inflammatory drug, growth factor, or immune adjuvant.
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5. The method of Claim 1, wherein said modulating is attracting and said administering is an agonist of CTACK or Vic.
6. The method of Claim 5, wherein:
- a) said movement is:
 - i) within said skin;
 - ii) chemotactic; or
 - iii) chemokinetic;
 - b) said administering is local, topical, subcutaneous, intradermal, or transdermal;
 - c) said administering is a CTACK or Vic ligand;
 - d) said cell is:
 - i) a CLA+ cell;
 - ii) a T cell;
 - iii) a dendritic cell; or
 - iv) a dendritic cell precursor;
 - v) a dermal fibroblast cell;
 - vi) a dermal endothelial cell; or
 - vii) a melanocyte; or
 - e) said cell moves into the dermis and/or epidermis layers of said skin.
7. The method of Claim 5, wherein:

- a) said agonist is selected from:
- i) CTACK or Vic; or
 - ii) a GPR2 ligand;
- b) said mammal is subject to a cutaneous lesion, tumor or viral, microbial, or parasitic infection;
- c) said agonist is administered in combination with an antibiotic, analgesic, immune suppressive therapeutic, anti-inflammatory drug, growth factor, or immune adjuvant.
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- 10 8. The method of Claim 5, wherein the agonist is administered as a cutaneous adjuvant.
9. A method of purifying a population of cells, said method comprising contacting said cells with CTACK or Vic, thereby resulting in the identification of cells expressing a receptor for said CTACK or Vic.
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10. The method of Claim 9, wherein said contacting results in specific movement of said cells to a site for purification.
- 20 11. The method of Claim 9, wherein said movement is through pores of a membrane.
12. A method of producing a ligand:receptor complex, comprising contacting:
- 25 a) a mammalian CTACK with a GPR2 receptor; or
- b) a mammalian Vic with a GPR2 receptor;
- wherein at least one of said ligand or receptor is recombinant or purified, thereby allowing said complex to form.
- 30 13. The method of Claim 12, wherein:
- a) said complex results in a Ca⁺⁺ flux;
 - b) said GPR2 receptor is on a cell;

- c) said complex formation results in a physiological change in the cell expressing said GPR2 receptor;
- d) said contacting is in combination with IL-2 and/or interferon- α ; or
- e) said contacting allows quantitative detection of said ligand.

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14. A method of modulating physiology or development of a GPR2 expressing cell comprising contacting said cell to an agonist or antagonist of a mammalian Vic or CTACK, wherein one of said GPR2 receptor or said agonist or antagonist is recombinant or purified.

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15. The method of Claim 14, wherein:

A) said antagonist is:

1) an antibody which:

- a) neutralizes said mammalian Vic;
- b) neutralizes said mammalian CTACK; or
- c) blocks ligand binding by GPR2; or

2) a mutein of said Vic or CTACK; or

B) said physiology is selected from:

- 1) a cellular calcium flux;
- 2) a chemoattractant response;
- 3) a cellular morphology modification response;
- 4) phosphoinositide lipid turnover; or
- 5) an antiviral response.

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16. The method of Claim 15, wherein:

a) said antagonist is an antibody and said physiology is a chemoattractant response; or

b) said modulating is blocking, and said physiology is an inflammatory response.

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17. A method of testing a compound for ability to affect GPR2 receptor-ligand interaction, said method comprising comparing the interaction of GPR2 with Vic or CTACK in the presence and absence of said compound.

5 18. The method of Claim 17, wherein said compound is an antibody against GPR2, Vic, or CTACK.

19. A primate GPR2, comprising sequence of MGTEVLEQ (see SEQ ID NO: 2).

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20. A nucleic acid encoding said GPR2 of Claim 19.

21. An antibody which binds selectively to MGTEVLEQ (see SEQ ID NO: 2).

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22. A method of treating a patient suffering from a skin disorder comprising administering an effective amount of an antagonist against GPR2, Vic, or CTACK.

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23. The method of Claim 22, wherein the antagonist is an antibody.